AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. Contract ID Code	Page 1 Of 23
Firm-Fixed-Price	

2. Amendment/Modification No.	3. Effective Date	4. Requisition/Purchase Req No.	5. Project No. (If applicable)
0002	2007JUN15	SEE SCHEDULE	

6. Issued By Code W56HZV

U.S. ARMY TACOM LCMC
AMSTA-AQ-ADED
REBECCA TABOR (586)574-6290
WARREN, MICHIGAN 48397-5000
HTTP://CONTRACTING.TACOM.ARMY.MIL

EMAIL: REBECCA.TABOR@US.ARMY.MIL

7. Administered By (If other than Item 6) Code

SCD PAS ADP PT

8. Name And Address Of Contractor (No., Street, City, County, State and Zip Code)

Code Facility Code

[X] **9A. Amendment Of Solicitation No.**
W56HZV-07-R-0343

9B. Dated (See Item 11)
2007MAY18

[ ] **10A. Modification Of Contract/Order No.**

10B. Dated (See Item 13)

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

[X] **The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers**

[X] **is extended,** [ ] **is not extended.** 2007JUL02 01:00pm

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing items 8 and 15, and returning 2 signed **copies of the amendments: (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.**

12. Accounting And Appropriation Data (If required)

13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS
It Modifies The Contract/Order No. As Described In Item 14.

[ ] **A. This Change Order is Issued Pursuant To: The Changes Set Forth In Item 14 Are Made In The Contract/Order No. In Item 10A.**

[ ] **B. The Above Numbered Contract/Order Is Modified To Reflect The Administrative Changes (such as changes in paying office, appropriation data, etc.) Set Forth In Item 14, Pursuant To The Authority of FAR 43.103(b).**

[ ] **C. This Supplemental Agreement Is Entered Into Pursuant To Authority Of:**

[ ] **D. Other (Specify type of modification and authority)**

E. IMPORTANT: Contractor [ ] **is not,** [ ] **is required to sign this document and return _____ copies to the Issuing Office.**

14. Description Of Amendment/Modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SEE SECOND PAGE FOR DESCRIPTION

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. Name And Title Of Signer (Type or print)		16A. Name And Title Of Contracting Officer (Type or print)	
15B. Contractor/Offeror	**15C. Date Signed**	**16B. United States Of America**	**16C. Date Signed**
_____ (Signature of person authorized to sign)		By /SIGNED/ (Signature of Contracting Officer)	

Name of Offeror or Contractor:

SECTION A - SUPPLEMENTAL INFORMATION

1. The purpose of Amendment 0002 to Solicitation W56HZV-07-R-0343 is to incorporate changes to Section C, Paragraph 12.

2. The date and closing time is extended to 1:00 PM EDT, 02 July 2007.

3. All other terms and conditions of this solicitation remain unchanged.

*** END OF NARRATIVE A0002 ***

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

Section C

C.1 STATEMENT OF WORK

C.1.1 This statement of work defines the effort required for the purchase of the Buffalo Mine Protected Clearance Vehicle (MPCV). The Buffalo MPCV is a six wheeled Blast Resistant vehicle that is capable of interrogating and classifying suspected explosive hazards, including improvised explosive devices (IEDs). The Buffalo MPCVs articulating arm with its digging/lifting attachment and camera/display monitor is used to remotely interrogate a suspected explosive hazard and allow the crew to confirm, deny and/or classify the hazard from inside the vehicle.

C.1.2 The Contractor shall manufacture and deliver the specified Buffalo MPCV, specified under Section B of this scope, which meet all the technical requirements of Purchase Description (PD) Buffalo MPCV Purchase Description (ATPD 2373 MPCV), hereafter referred to as PD 2373, see Attachment 1. This scope includes both the development of the Hardware and the Logistics documentation required to support the Buffalo MPCV. This includes repairs and spare parts, and consumable and maintenance parts in support of Verification, Log Demo, Operational User Testing (OT), Demonstration Testing (DT), and all other events covered by this statement of work.

C.1.3 The Buffalo MPCV is used in complement with the Vehicle Mounted Mine Detector (VMMD) and Medium Mine Protected Vehicle (MMPV) to conduct route and area clearance operations. The Buffalo MPCV will be organic to the Clearance Company in support of the Engineer Brigade, Combat Support Brigade (Maneuver Enhancement), or Brigade Combat Team. The characteristics of the vehicle and associated subsystems are described in PD 2373.

C.2 VEHICLE REQUIREMENTS

C.2.1 The Buffalo Mine Protected Clearance Vehicle (MPCV): The contractor, as an independent entity, and not as an agent of the U.S. government, shall furnish all engineering, test data, supporting labor, supplies, services, facilities and equipment necessary for the delivery of MPCV Systems, as required under the contract. The MPCV systems delivered under this contract shall meet all specifications and requirements as outlined in the Buffalo MPCV Purchase Description (ATPD 2373 MPCV).

C.2.2 Transportability: The Buffalo MPCV shall be fit for self-deployment on highways worldwide; and capable of being transported by rail, marine, and air modes. See ATPD 2373 paragraph 3.15.2 for specific transportability requirements. The contractor shall submit a Transportability Report with changes reflected in the final report. Contractor shall also provide errata sheet specifying change and location (CDRL A001).

C.2.3 System Information: The Buffalo MPCV is organic to the Clearance Company to conduct route clearance operations. The Buffalo MPCV will primarily be employed in support of the Engineer Brigade, Maneuver Enhancement Brigade or Maneuver Brigade Combat Team.

C.2.4 The Government reserves the right to withhold payment of hardware if data deliverables are delinquent. The Contractor is responsible for ensuring that all data deliverables required in this scope are completed and accepted in order to meet the overpack requirements in paragraph C.9.1.6. The Government is aware that the first vehicles delivered under this contract for testing (qty up to 7 systems) and for the first unit equipped (qty 12 systems) will not have the TMs or TBs overpacked.

C.2.5 Use of common components and parts already existing within the Army supply system is preferred.

C.2.6 Camouflage Pattern: It is the contractors responsibility to develop and obtain approval of the camouflage pattern (CDRL A002).

C.2.7 Government Furnished Equipment (GFE): The contractor shall provide the means to handle delivery and storage of GFE equipment

(CDRL A003).

C.3 APPLICABLE DOCUMENTS

C.3.1 The following documents form a part of the SOW to the extent specified herein. Additional applicable documents can be found in the Buffalo MPCV Purchase Description (Section 2). While every effort has been made to ensure the completeness of these lists, document users are cautioned that they must meet all the specified requirements in Buffalo MPCV Purchase Description (cited in Sections 3 & 4), whether or not they are listed.

- Federal Motor Vehicle Safety Standards and Regulations (U.S. Department of Transportation, National Highway Traffic, Safety Administration, Safety Assurance, Office of Vehicle Safety Compliance)
- AFJMAN 24-104/TM 38-250
- AR 700-15
- AFJMAN 24-104/TM 38-250
- DLAD 4145.41/AR 750-143
- FAR 52.247-29
- MIL-STD-129
- MIL-STD-2073-1
- TITLE 49, Code of Federal Regulations, Part 100-199, Transportation

C.3.2 The following documents form a part of the SOW to the extent specified herein. The listing of required documents may not be fully inclusive of all required specifications or standards required for support of logistic documentation development.

Note: The most recent versions of these documents shall be utilized Data Items can be found at:
http://assist.daps.dla.mil/quicksearch/fsc_quicksearch.cfm

DATA ITEMS

DI-ALSS-81530	LOGISTICS PRODUCTS
DI-ALSS-81529	LOGISTICS MANAGEMENT INFORMATION DATA PRODUCTS
DI-ADMN-81505	REPORT, RECORD OF MEETING/MINUTES
DI-SAFT-80102B	SAFETY ASSESSMENT REPORT
DI-PACK-80120B	PACKAGING
DI-CMAN-80639C	ENGINEERING CHANGE PROPOSAL (ECP)
DI-MISC-81397	HMMP REPORT
DI-ALSS-80686	SPECIAL TOOLS TEST EQUIPMENT (STTE)
DI-ILSS-80872	TRAINING MATERIALS

SPECIFICATIONS/STANDARDS

MIL-DTL-31000C	TECHNICAL DATA PACKAGES
MIL-STD-1474D	DESIGN CRITERIA STANDARD: NOISE LIMITS
MIL-PRF-49506	PERFORMANCE SPECIFICATIOIN LOGISTICS MANAGEMENT INFORMATION
MIL-STD-40051-2	PREPARATION OF DIGITAL TECHNCIAL INFORMATION FOR PAGE-BASED TECHNICAL MANUAL
MIL-HDBK-1222C-1	GUIDE TO STYLE AND WORK PACKAGES FOR TECHNICAL MANUALS
MIL-STD-882D	STANDARD PRACTICE FOR SYSTEM SAFETY
MIL-STD-2073-1D	STANDARD PRACTICE FOR MILITARY PACKAGING
MIL-STD- 1472F	DOD HUMAN ENGINEERING
MIL-PRF-63004D	LUBRICATION ORDERS
MIL-PRF-63002J	REQUIREMENTS FOR PREPARATION OF MODIFICATION WORK ORDERS

OTHER GOVERNMENT DOCUMENTS

DA PAM 700-60	DEPARTMENT OF THE ARMY SKO
DA PAM 700-21	TMDE REGISTER INDEX
AMC-P 700-25	GUIDE TO PROVISIONING
ASTM D4169	STANDARD PRACTICE FOR PERFORMING TESTING OF SHIPPING CONTAINERS
NAS 411	HAZARDOUS MATERIALS MANAGEMENT
FM 21-10	FIELD HYGIENE AND SANITATION
CFR 29, 40, 49	CODE OF FEDERAL REGULATIONS
AFMAN 24-204	HAZMAT AND GENERAL PACKAGING
QAPQ	QUALITY ASSURANCE PROVISIONING GUIDANCE
INTERNATIONAL MARATIME DANGEROUS GOODS CODE	
TB 750-93-1	FUNCTIONAL GROUP CODES (FGC) TECHNICAL BULLETIN
AR 750-1	ARMY MATERIAL MAINTENANCE POLICY
MIL-HDBK-502	ACQUISITION LOGISTICS
FM 3-5	NBC DECONTAMINATION
TRADOC REG 350-70	TOTAL ARMY TRAINING SYSTEM

C.4 DATA AND SOFTWARE DELIVERY
The Contractor is responsible for meeting all of the requirements defined in this contract. The Contractor shall furnish all services, materials, and the equipment required for testing, Log Demo and Verification.

C.4.1 DATA REQUIREMENTS
C.4.1.1 You shall prepare each data submittal as described in the Data Item Descriptions (DID) and the Contract Data Requirements List (CDRL).

C.4.1.2 Data Items will be submitted in English in one of the following forms in order of Government preference:

C.4.1.3 Contractor sends via e-mail in a TACOM compatible format.

C.4.1.4 Contractor mails Disks or CD-ROM in a TACOM compatible format.
The Contractor shall annotate all CD-ROMs with:
- Contract Number
- CDRL Number and Item (A007, MAC)
- Delivery Type (Draft, Final)
- Date
- Contractor Name
- System Name

C.4.1.5 Contractor submits using any other mutually accepted media.

C.4.1.6 When the Contractor is delivering data using paper as the medium, the contractor will deliver the quantities of data listed on the CDRL in Section J. When the contractor uses electronic media, only one copy will be delivered to each address on the CDRL.

C.4.2 The PCO is the approving authority for all logistics documents delivered under this contract. AMSTA-LC-CJB referenced throughout this scope refers to the guidance signed by the Buffalo MPCV Logistics Manager. All guidance provided by the Buffalo MPCV Logistics Manager will be submitted through the Government Procuring Contracting Officer (PCO). Any guidance provided by any other Government representative should immediately be brought to the Buffalo MPCV Logistics Managers attention for concurrence or rejection of the guidance. Only the Government PCO is authorized to modify or change this scope of work. The Government Contract specialist shall be included on all email submittals for documentation and tracking purposes.

C.4.3 AMSTA-LC-CJB and PM-AMS are working with PEO- STRI to develop training simulators for the Buffalo MPCV. The Government may request: dimensions, sound clips, video, drawings, panel layouts, etc to assist in the development of the training simulators. The Contractor shall furnish requested information. The documentation collected for this purpose may be marked Proprietary by the Contractor and will not be used for other purposes. The training simulators will be updated during the life of the contract to reflect changes to configuration. (CDRL A004)

C.5 SYSTEM/PROJECT MANAGEMENT
The Contractor shall provide Government personnel with in-plant access to hardware and all technical and logistics data in support of contract efforts. The Contractor shall provide copies of documents generated through the course of the contract upon request except for proprietary documents which must be reviewed on contractor premises.

C.6 MEETINGS/CONFERENCES
C.6.1 Start of Work (SOW) Meeting
C.6.1.1 Thirty (30) days after contract award a Start of Work Meeting shall be held at the Contractors facility. This meeting will focus on contract terms and conditions, a review of all data requirements, required specifications, program schedule, test requirements and relevant logistics requirements to assure a complete understanding of the requirements. The meeting will also include a reliability meeting, a publications meeting, a provisioning guidance conference, and a new equipment training meeting. The Contractor shall make available contract administration personnel, management, engineers, and logistic support personnel as the Government deems required.

C.6.1.2 In this meeting, the Contractor shall present detailed paths/milestone graphic presentations that defines Contractor performance necessary to meet contract delivery requirements as defined in the Scope of Work. The Contractor shall provide to the Government an internal list of all functional Contractor personnel involved in this contract. This list will be upgraded as required to maintain accuracy. The following discussions are to be part of the Start of Work Conference:

- Provisioning Guidance: to provide guidance to the Contractor for documenting and submitting provisioning data.

- Engineering Data for Provisioning (EDFP): During this conference, the Government will discuss all EDFP requirements.

- Publications Guidance: To review and discuss publications requirements.

- New Equipment Training Meeting: To review and discuss training requirements

- Maintenance Planning: To review and discuss operator and maintenance functions and what constitutes reparable items.

- Testing and Reliability: To review and discuss the Purchase Description and expected testing requirements.

- Other Integrated Logistics Support (ILS) issues, such as safety.

C.6.1.3 At Start of Work Meeting, the Contractor will outline the processes and data base intended for use in screening each Part Number for identification of the prime source and/or for commonality of part within the defense supply system. This may be Federal Logistics Information System (FLIS), WEBFLIS, or by batch submittal part numbers to DLIS. Screening system used is at the discretion of the contractor and will be identified prior to SOW. The Government will, at the request of the Contractor, provide a demonstration of parts screening procedures expected throughout the Provisioning process. Guidelines and full screening requirements addressed at the Start of Work will be adhered to throughout the Provisioning process.

C.6.1.3.1 At the Start of Work meeting the Contractor will provide the Government with a complete list of major components utilized in the Buffalo and identify each component by the original source of supply, manufacturer's part number and name. This includes original commercial parts modified by the contractor for application to the Buffalo. Major assemblies to be identified at the SOW shall include but are not limited to the following:

Engine:
Transmission:
Front Axles:
Rear Axles:
Batteries:
Tire Assemblies:
Tires:
Wheels:
Transfer Gearcase:
Starter:
Alternator:
Fuel Pump:
Differential:
Brake System:

The contractor agrees to supply this information at the SOW meeting and to allow the Government to research its legacy data for provisioning data, RPSTL artwork, maintenance procedures, lubrication instructions, troubleshooting and Preventive Maintenance Checks and Services (PMCS). If found, the above technical data will be provided to the Contractor as source data GFI for incorporation into the Buffalo ILS effort. The Contractor shall be responsible for a technical review of the GFI data to make certain system peculiarities to Buffalo are compatible and will correct incompatible details as required to accurately reflect the Buffalo equipment designs.

C.6.2 Maintenance, Provisioning, and Publication (MPP) Review: These conferences will be held at the Contractors facility unless the parties agree to move it to a different location. The first conference will be held sixty (60) days after the Contract Award. At that meeting the next MPP Conference will be scheduled.

The following areas will be discussed at the MPP review:

C.6.2.1 Provisioning Data: The Government will look over the Contractors provisioning data available thus far and provide guidance and review. The Government will clarify any areas or guidance at this time.

C.6.2.2 Engineering Data for Provisioning (EDFP): The Government will review all EDFP requirements. The Government will look over the Contractors EDFP, to facilitate the NSN request process, prior to the provisioning conference.

C.6.2.3 Publications Guidance: The Government will review and discuss publications requirements. The Government will look over at least one work package that the Contractor has prepared to provide clarification and guidance.

C.6.3 Provisioning Conference: Formal provisioning conferences will be held; the first Conference will be held thirty (30) days after the first MPP Review. Follow-on provisioning conferences will be TBD, based on discussion between the Government and Contractor. The Contractor will provide the following as necessary to support the provisioning conference effort:

1. Hard copy of the Provisioning Parts List (PPL) in a format acceptable to TACOM Commodity Command Standard System (CCSS) database (1552 or LSA-036 format).
2. Each line (Part List Item Sequence Number) on the Provisioning Parts List (PPL) will have an accompanying Engineering Data for Provisioning (EDFP) or other supporting documentation
3. Facilities and office space including copying and data processing access.
4. End Item availability as necessary

C.6.4 Integrated Product Teams and Integrated Product Team Meetings. Integrated Product Teams (IPTs) shall be used in the manufacture, test, refurbishment, and management phases of this program. These IPTs shall include Government, Contractor, and Subcontractor participation. The IPT will be used as a forum for program reviews, design reviews, resolution of issues, and other contract-related items. IPT meetings shall be held at the Contractors or subcontractors facilities. IPT meetings will be held every four months or when deemed necessary by the Government. Conference calls/video conferences may suffice for IPT meetings, when appropriate. Government and Contractor will coordinate the meeting dates at least 10 working days before the IPT starts to allow for travel time.

C.6.5 Contract Status Review Conference: As part of the overall contract management effort, the Contractor shall provide technical and managerial representative(s) to attend periodic meetings, at least once per year, at TACOM, to review contract status. This review shall be for one eight-hour day, or as specified. A conference may be called by either the Government or the Contractor to clarify any questions in regard to contract requirements. Topics to be discussed shall include, but not be limited to, contract status, testing, production, logistics, technical issues, and deliverables. The Contractor will coordinate an agenda with the Procuring Contracting Officer (PCO) no later than five days prior to the meeting.

C.6.6 The Contractor shall take minutes for all meetings. The System Acquisition Manager (SAM) approved minutes shall be distributed to all parties not later than 10 days after the completion of the meeting, in accordance with CDRL A005.

C.6.7 When meetings are held at the Contractor's facility, the Contractor will make the following available for the Government's use:

(a) Required technical, logistics or other documentation (including drawings, computer data bases, publications, and other required data)

(b) Computer resources, as required

(c) Access to Internet, via LAN connection

(d) Access to a Buffalo MPCV

C.6.8 Project Planning Chart. The contractor shall submit a Progress Planning Chart in accordance with CDRL A006. The contractor shall submit one Progress Planning Chart covering all CLINs that the contractor is performing work on under the contract.

C.7 CONFIGURATION MANAGEMENT

C.7.1 CONFIGURATION BASELINES

C.7.1.1 The MPCV System, delivered with this Contract, must comply with all testing requirements in the ATPD-2373 paragraph 4. The Configuration for the MPCV Systems is frozen at the completion of testing and meeting of the key performance parameters, as defined in Section E/PD Paragraph of this contract. This Configuration will be the basis for all new logistics documentation. The MPCV System will be subject to approval of Engineering Change Proposals (ECPs) and Design Change Notices (DCNs) for Configuration Management. No changes shall be made to the hardware without appropriate documentation.

C.7.1.2 The Contractor shall be responsible for configuration control throughout the period of this contract. The Contractor shall establish a production baseline after successful completion of both the Contractor's and the Government's portions of the First Article Test (FAT). Any changes made prior to Testing must meet the requirements of ATPD-2373. This baseline will identify and document the functional and physical characteristics of the MPCV. The Government requires a standardized vehicle configuration to improve supportability. The Government acknowledges that the Contractor may want to offer, to the Government, configuration changes being introduced to its commercial production during the term of this contract. However, its important for the Government to assess the impact of any proposed vehicle changes to the logistics and technical requirements established for this program. The Contractor is therefore required to notify the Contracting Officer prior to implementing any configuration changes. The Government reserves the right to disapprove proposed changes that would adversely affect the program. Prior to production, the Contractor shall notify the Government of any impending federal laws and regulations scheduled to go into effect during the life of this contract that may impact configuration, i.e. Environmental Protection Agency (EPA) emissions requirements.

C.7.2 CONFIGURATION MANAGEMENT REQUIREMENTS

C.7.2.1 Configuration Management/Baseline Configuration. Upon completion of First Article Test and Inspection, the Contractor shall work with the U.S. Government to establish a product baseline. The Contractor shall implement configuration control methods and procedures that maintain the integrity of the unit to assure that the form, fit and function characteristics of the MPCV are met. When configuration changes are proposed, the Contractor shall notify the Government PCO prior to change(s).

C.7.2.2 Configuration Status Accounting Report Information. The Contractor shall provide a Configuration Status Accounting Report in accordance with DI-CMAN-81253A, CDRL A007.

C.7.2.3 Allocated Baseline. The Contractor shall prepare a Bill of Material (BOM) in Contractor format. The BOM shall accurately reflect the as-built condition and shall be submitted concurrently with the First Production Unit Inspection (FPUI) item delivery. Changes made during FPUI will require the Contractor to update and resubmit the BOM prior to FPUI approval. Upon approval of the FPUI, the BOM shall constitute the approved Product Configuration Identification (PCI) for this item. The Contractor shall keep records of all changes which impact the PCI prior to First Article Test and Inspection. The records shall include at a minimum the following information: contractor-supplied unique control numbers, date of submission, complete technical description of change, reason for change, systems affected by the change, list of components remove/reused and/or new components and Contractor primary point of contact for Configuration Management. Logistics impacts (Maintenance, Spares, Training, Special Tools, Technical Manuals, etc.) shall be addressed and delineated. Upon request, Contractor records shall be made available for Government review. Any item changes made will

require the Contractor to update and resubmit the affected portions of the BOM.

C.7.2.3.1 The Government will not be responsible for any additional costs to vehicles or software associated with any changes submitted by the Contractor under this section, nor will the Government be liable for costs incurred by the Contractor due to delay in contract performance which may result from any change submission unless the parties agree otherwise.

C.7.2.4 Approval of Engineering Changes. Government approval of changes, following acceptance of the Product Baseline shall not be construed as relieving the Contractor from its responsibility to furnish all items in conformance with contract requirements, including full responsibility for failure in operation of equipment which resulted from changes previously approved by the Government. The Government reserves the right to disapprove any change where Government review shows the changes would have an adverse effect.

C.7.2.5 Configuration Changes. Changes to the Product Baseline shall only be incorporated in accordance with (IAW) the requirement of this section. The Contractor shall propose changes to the established baseline via the submission of Engineering Change Proposals (ECPs), Value Engineering Change Proposals (VECPs), and Request for Deviation (RFDs) CDRL A008. The Contractor shall implement positive configuration control methods and procedures that maintain the integrity and history of the established baseline. Sufficient supporting data to evaluate the proposed change, such as drawings, supplemental drawings, sketches, specifications, or manufacturers data sheets, shall be submitted with ECPs, VECPs, and RFDs. If changes result in decreased cost, the Government may, at the sole discretion of the Contracting Officer, require an equitable downward adjustment to the contract price. The Contractor shall certify cost impact, and the Government will have the right to conduct post-change audits. If the Government desires a configuration change, the PCO will direct the Contractor to submit an ECP.

C.7.2.6 Engineering Change Proposal (ECP) Definitions. Class I ECP: An Engineering Change Proposal that AFFECTS the form, fit, or function of an approved configuration baseline and its associated technical documentation, and changes affecting the safety, logistics support, cost, warranties and the contract. Class II ECP: An Engineering Change Proposal that has NO EFFECT on any of the factors listed above for the Class I ECP definition.

C.7.2.6.1 Class I ECP Changes Contractor Requested. The contractor shall submit copies of proposed Class I ECP changes per DI-CMAN-80639C, CDRL A009 upon determination of a need for such changes. Supporting documentation shall be sufficient to fully understand the Class I ECP. Impact statements for safety, MANPRINT, integrated logistic support, technical manuals, and transportability will be in Contractor format. The Government reserves the right to require additional testing and test results for proposed changes. The Contractor shall not implement any Class I ECP change prior to Government approval. Notwithstanding any Contractor configuration changes under this provision, the Contractor shall not be relieved of its responsibility to conform to the delivery requirements of this contract.

C.7.2.6.2 Class I ECP Changes Government Directed. In the event the Government desires a change to the end item configuration, the PCO will request, in-writing, a technical/price proposal from the Contractor. Copies of ECPs will be submitted per DI-CMAN-80639C, CDRL A009 and forwarded to the PCO within 30 days of the request.

C.7.2.6.2.1 Technical Data for Government Directed Changes. Where the Government pays for a Class I (ECP) design change under this provision, all efforts expanded by the Contractor will result in the unlimited right, title and interest of those changes to be vested in the Government. All drawings developed for these changes shall be delivered/prepared as Developmental Drawings (CDRL A010 and Attachment 011)

C.7.2.6.2.2 Technical Data Format for Government Directed Changes. At the Governments option, the data may be submitted in either Contractor format or Government formats. In the event Government format is required, the Government will request a pricing proposal. The cost of said data will be included in the funding provided for in the contract modification. The drawing format shall be in accordance with the TDP Option Selection Worksheet (See
Attachment 011).

C.7.2.7 Value Engineering Change Proposals (VECPs). The Contractor shall prepare VECPs in the same manner as Class I ECPs.

C.7.2.7.1 Class II Changes. Class II changes have no effect on the Form, Fit, and Function of the item. The Government will review this documentation for the proper classification. If the Government determines that a change submitted as a Class II is actually a Class I, the Contractor will be notified and shall prepare and submit a Class I ECP within 5 working days for Government review. If the Government rejects the resubmitted Class I ECP, the Contractor shall be responsible to retrofit all items produced with the change.

C.7.2.7.2 Engineering Change Inspection and Test. The Government reserves the right to inspect any affected systems or components, at Contractor expense, in order to determine whether the change submitted by ECP should be approved. Any production or delivery delays caused by Government re-inspection will not be considered as excusable delay under the Default clause. In addition, such delays shall not be the basis for an upward adjustment in contract prices or an extension of delivery schedule. The Government reserves the right to conduct additional testing at Contractor expense if the Government believes any proposed engineering change may have a potential negative impact on the ability of the product to meet the requirements of the purchase description.

C.7.2.8 Effectivity Certification. Changes resulting from Class I ECPS and VECPs, shall be incorporated into the production line through contract modification. Actual cut-in of these changes shall be at a single END ITEM cut-in-point. Each ECP and VECP shall be

applied to the production line at one time in their entirety. The Contractor shall maintain the original effectivity point Certification on file.

C.7.2.9 Electronic Data Delivery for Submittal of Configuration Data. The Contractor shall submit ECPs/VECPs/RFDs to the Government electronically. These data submittals shall be in MS Word or Adobe Acrobat formats. For all electronic files, File Transfer Protocol (FTP) can be used. A test transmission shall be conducted with 30 days after the start of contract to work out any problems associated with the electronic transfer.

C.8 LOGISTICS DOCUMENTATION REQUIREMENTS

C.8.1 The Contractor is responsible to update and create, as necessary, logistics documentation for the Buffalo MPCV. The Contractor can use existing documentation delivered under TACOM Contract W56HZV-06-C-0245 as baseline information; all data used from this contract must be validated as to ensure accuracy. All updates to this documentation shall include any and all components that differ from the existing Buffalo MPCV procured under this contract. This shall include any new components, assemblies, or parts inserted in the Buffalo MPCV due to testing, upgrades, or design changes. The creation of new documentation will be, at a minimum, in the form of a new Operators Manual, Maintenance Manual and Parts Manual.

C.8.2 The Government requires the Contractor to submit acceptable documentation on the required due date as detailed in the applicable Scope of Work paragraphs and CDRLs. It is the Contractors responsibility to validate all documentation prior to submittal to the Government. If the Government finds that there has not been validation of data submitted, review of documentation will cease and the data submittal will not be considered for acceptance.

C.8.3 It shall be understood that Government receipt of documentation does not constitute acceptance. Government acceptance of documentation hinges on the completeness, accuracy, compatibility of submitted documentation, and the following of applicable military standards. The Contractor shall carefully review all data explained in the applicable Scope of Work paragraphs to fully understand what the Government is basing its acceptance of documentation on.

C.8.4 CORRECTION OF ERRORS.

The contractor shall correct all errors found in the TMs, ETMs, and electronic data files resulting from contractor and Government reviews, test or validation/verification at no additional cost to Government.

C.9 INTEGRATED LOGISTICS SUPPORT

C.9.1 INTEGRATED LOGISTICS SUPPORT (ILS) DEVELOPMENT

C.9.1.1 The Government requires complete ILS development, provisioning, technical publications, and special tools and test equipment list for fielded and new production configurations of the Buffalo MPCV systems. The following statement of work outlines the requirements

C.9.1.2 The initial ILS development (provisioning) will focus on urgent government supply support of the agreed to fielded and new ASLs to include actual unplanned and increased maintenance and field usage of major assemblies and repair parts. This will include major assemblies and repair parts usage demands as the result of combat related damages. Details will be discussed during the start of work conference or specific designated meeting(s).

C.9.1.3 The usage of major assemblies and repair parts of the different configurations (fielded and new production end item) will be identified by serial number break points. Special tools and test equipment will also require usage identification either by serial number or vender identification.

C.9.1.4 The contractor will use Military Performance (MIL-PRF) Specification 49506, Logistics Management Information (LMI), dated 11 November 1996, for use in identifying content, format, delivery and related guidance for logistics data except as otherwise identified in this contract. Also, Army Regulation (AR) 750-1, Army Materiel Maintenance Policy, dated 18 August 2003, may be used for guidance in identifying the levels of maintenance within the Army maintenance structure.

C.9.1.5 Maintenance Planning. The contractor shall conduct Maintenance Planning to determine the maintainability characteristics of all Buffalo MPCV configurations. The analysis shall be documented in the contractors format as an LMI summary entitled Maintenance Analysis, and will identify the maintenance functions, level of maintenance, manpower, and support equipment required for each repairable item. The analysis will be in end item hardware breakdown sequence, and will also identify Functional Group Codes (In Accordance With (IAW) TB 750-93-1 (with Change 5, dated 27 Jun 1983), for each item. Instructions are contained in Attachment 2 (Maintenance Analysis). The LMI summary shall be delivered IAW DI-ALSS-81530 and CDRL A011.

C.9.2 PROVISIONING:

C.9.2.1 PROVISIONING PARTS LIST: The Contractor shall develop and deliver LMI, (Provisioning Parts List (PPL)) IAW DI-ALSS-81529, and Attachment 3 (Provisioning Data), and CDRL A012 LMI (PPL) data is required IAW MIL-PRF-49506 (dated 11 Nov 96) as specified on the LMI data worksheet for all new or updated parts and special tools for field, sustainment and depot maintenance levels, BII, COEI, and Additional Authorized List (AAL) items identified on the Buffalo.

C.9.2.2 Prime part numbers and Commercial and Government Entity Codes (CAGEC) will reflect the original equipment manufacturers

information unless that part is modified, changing form, fit, and function or is proprietary.

C.9.2.3 The data shall be capable of being loaded into our Provisioning Master Record (PMR) without any modification to the data. CCSS has various methods by which the Contractor can deliver provisioning data and the Government will discuss these methods at the start of work meeting.

C.9.2.4 ENGINEERING DATA FOR PROVISIONING (EDFP) CDRL A013: The Contractor shall prepare the EDFP, i.e. drawings as follows: A separate drawing is required for each part number. Drawings are not required for items accompanied by a copy of provisioning screening (e.g. FLIS, WEBFLIS, or by batch submittal part numbers to DLIS) which indicates this item has previously been assigned a valid stock number. The Contractor shall make available drawings for Government review. After the government approves each drawing as being suitable for NSN assignment, the drawings shall be submitted on a Compact Disk-Read Only Memory (CD-ROM) or restricted web site in Adobe Acrobat .PDF file, or some other software product format, web based file of FTP site that the government agrees to, with each PPL submittal. A separate file is required for each drawing. The CD-ROM or approved file shall include a cross reference list that identifies the part number, drawing number, PLISN and file name for each drawing. Drawings will have all required dimensions (metric preferred). Drawings (hardcopy and electronic) shall contain the following information:
a. Commercial and Government Entity Code (CAGEC)
b. Part Number
c. Provisioning Line Item Sequence Number (PLISN)
d. Provisioning Contract Control Number (PCCN)
e. Nomenclature. For industry standard common hardware, include descriptive nomenclature. Make from items made from industry standard components shall include additional descriptive nomenclature. Examples of additional descriptive information include, at a minimum, the physical dimensions and all classifications (i.e. hardness, grade, thread type, surface finish, coatings, industry specifications and etc.). Common hardware includes nuts, bolts, screws, washers, o-rings, cotter pins, c-clips, clevis pins, lamp bulbs, etc.

C.9.2.5 PROVISIONING SCREENING: Contractor shall conduct provisioning screening of each item on the PPL for standardization or NSN assignment IAW DI-ALSS-81529 and CDRL A014 Provisioning screening using the Federal Logistics Information System (FLIS), WEBFLIS FEDLOG or by batch submittal of part numbers to DLIS. HAYSTACK is no longer the official provisioning screening program. These results will be used to select valid part numbers, NSNs, and current unit of measure/issue prices for provisioning purposes. Common hardware item (nuts, bolts, screws, washers, lock washers, rivets, etc. for current NSN assignment) will be screened by technical characteristics. The screening results must be available for review by government representative.

C.9.2.6 For additional information on FLIS and batch submittals to DLIS, refer to the Provisioning Screening User Guide. For additional information on WEBFLIS, go to www.dlis.dla.mil/webflis. There are two versions of WEBFLIS: Public Query and Restricted/Sign-on. Anyone with access to the Internet may access the Public Query version. The Restricted/Sign-on version requires a valid userid/password to access the system. Userids may be obtained by filling out a registration form. The registration forms are found on the DLIS web site. After accessing the Home Page, go into the Forms and Publications section and select the registration form for WEBFLIS. There are two forms available - one for government workers and one for government sponsored contractors.

C.9.2.7 Drawing Information: A separate drawing is required for each part number. Drawings are not required for items accompanied by a copy of provisioning screening (e.g. FLIS, WEBFLIS, or by batch submittal part numbers to DLIS) which indicates this item has previously been assigned a valid stock number. The Contractor shall make available drawings at each provisioning conference for Government review. After the government approves each drawing as being suitable for NSN assignment, the drawings shall be submitted on a Compact Disk-Read Only Memory (CD-ROM) in Adobe Acrobat .PDF file, some other software product format, web based file or FTP site that the government agrees to, with each PPL submittal. A separate file is required for each drawing. The CD-ROM or approved file shall include a cross reference list that identifies the part number, drawing number, PLISN and file name for each drawing. Drawings will have all required dimensions (metric preferred). Drawings (hardcopy and electronic) shall contain the following information:
a. Commercial and Government Entity Code (CAGEC) (vendor & OEM)
b. Part Number (vendor & OEM)
c. Provisioning Line Item Sequence Number (PLISN)
d. Provisioning Contract Control Number (PCCN)
e. Nomenclature. For industry standard common hardware, include descriptive nomenclature. Make from items made from industry standard components shall include additional descriptive nomenclature. Examples of additional descriptive information include, at a minimum, the physical dimensions and all classifications (i.e. hardness, grade, thread type, surface finish, coatings, industry specifications and etc.). Common hardware includes nuts, bolts, screws, washers, o-rings, cotter pins, c-clips, clevis pins, lamp bulbs, etc.

C.9.2.8 For additional information on FLIS and batch submittals to DLIS, refer to the Provisioning Screening User Guide. For additional information on WEBFLIS, go to www.dlis.dla.mil/webflis. There are two versions of WEBFLIS: Public Query and Restricted/Sign-on. Anyone with access to the Internet may access the Public Query version. The Restricted/Sign-on version requires a valid userid/password to access the system. Userids may be obtained by filling out a registration form. The registration forms are found on the DLIS web site. After accessing the Home Page, go into the Forms and Publications section and select the registration form for WEBFLIS. There are two forms available - one for government workers and one for government sponsored contractors.

C.9.2.9 Design Change Notices/Engineering Change Proposals (DCN/ECP). Contractor shall submit DCN/ECP LMI Data for those design items

and/or part number changes which modify, add, delete or supersede any of the Operating, Maintenance or Repair Parts Manual information that was provided previously for the Buffalo system. This information shall be submitted at a maximum of 60 working days after government ECP approval or a production change decision has been implemented. An approved ECP(s) shall be provided with each DCN submittal as applicable.

C.9.3 SPECIAL TOOLS AND TEST EQUIPMENT LIST (STTE)
C.9.3.1 Support Equipment Tools and Test Equipment (STTE). The contractor shall deliver a list of Support Equipment Tools and Test Equipment IAW DI-ILSS-80868 and CDRL A015. The list shall be in tabular form and shall identify special tools and test equipment not contained in U.S. Army Supply Catalogs. Supply Catalogs contain common tool sets and are listed at US Army LOGSA web site at https://weblog.logsa.army.mil/sko/index.cfm. Maximum use of common tools, support equipment, and TMDE normally organic to the user is preferred. The list shall provide Nomenclature, Cage Code, National Stock Number (NSN), if assigned, Part Number, level of maintenance, and price of each item on the list.

C.9.3.1.1 New TMDE items, those not identified in U.S: Army Supply Catalogs may require special source and calibration documentation in order to update/ provide data for possible inclusion to the TMDE register (DA Pam 700-21-1). The contractor shall provide all required data for all new TMDE.

C.9.3.1.2 The following paragraphs are included to clarify special tools for Army use. Special tools are not identified as components in a SKO SC. Special tools are--

C.9.3.1.2.1 Fabricated tools that are made from stocked items of bulk material, such as metal bars, sheets, rods, rope, lengths of chain, hasps, fasteners, and so forth. Fabricated tools are drawing number controlled and documented by functional group codes in RPSTLs and located in TMs as appendices. Fabricated tools are used on a single end item.

C.9.3.1.2.2 Tools that are supplied for military applications only (that is, a cannon tube artillery bore brush, BII) or tools having great military use but having little commercial application.

C.9.3.1.2.3 Tools designed to perform a specific task for use on a specific end item or on a specific component of an end item and not available in the common tool load that supports that end item/unit (for example, a spanner wrench used on a specific Ford engine model and on no other engine in the Army inventory).

C.10 TECHNICAL PUBLICATIONS: DELIVERED IN ACCORDANCE WITH CDRL A016
The Contractor shall deliver all data in English. All data delivered under this contract shall be submitted electronically via CD-ROM or electronic mail in a mutually agreed upon compatible format. The Government will provide electronic mail addresses during the Start of Work Meeting.

C.10.1 Technical Publications: Department of the Army Technical Manuals (TMs) and Department of the Army Repair Parts and Special Tools List (RPSTL).

C.10.1.1 The Contractor shall prepare and deliver one set of DA Technical Manuals (DATMs) to support the Buffalo POR Configuration in accordance with MIL-STD-40051-2 (ETM) (Dated 15 Oct 2004), Subject DoD Standard Practice-Preparation of Digital Technical Information for Page-Based TMs, Publications Requirements, Attachment 4, Publications Requirements, Department of the Army Repair Parts and Special Tools List (DA RPSTL), Attachment 5, TM Requirements Matrix, Attachment 6, and CDRL A016. [TM 9-2320-XXX-10 -- Operators Manual, TM 9-2320-XXX-24 -- Field and Sustainment Maintenance Manual, TM 9-2320-XXX-24P -- Field and Sustainment Maintenance Repair Parts and Special Tools List]

C.10.1.2 The Contractor will ensure that the POR Configurations are referenced in the manual by both UOC and by a serial number break-out. Tasks that vary between the POR Configurations shall have the serial numbers referenced for tasks unique to each configuration.

C.10.1.3 The TMs shall be divided into volumes if the page counts exceed 1500 pages (750 sheets.) An example of the TM Volume Designation would be TM 9-XXXX-XXX-24-1.

C.10.2 Electronic Technical Manual (ETM), CDRL A016.
The Contractor shall prepare and deliver ETMs and electronic files in accordance with Attachment 4, Publication Requirements.

C.10.3 The Contractor shall furnish unrestricted copyright releases for all TMs. The Contractor shall ensure that Government has the right to use, copy, and distribute the TMs, ETMs, and electronic data files delivered under this contract, electronically and in hard copy as the Government deems necessary. When the Contractor uses commercial data which covers a subcontractor's component(s) or portion thereof, and the subcontractors data contains copyrighted material, the Contractor shall be responsible for obtaining a copyright release from their subcontractor and furnishing such release to the Government. In the event no copyrighted information is used in a deliverable under this contract, the Contractor shall certify this in writing. The SAM shall review the copyright release or letter before the copyright material is released. This release/letter must be delivered with or before the final reproducible copy (FRC) it covers. An FRC shall be considered incomplete without this release/letter. The Contractor shall package and deliver all source material, defined as operating plans, standard procedures, computer documents and residual material, source codes, computer disks, computer tapes, and all other media containing digital files developed to fulfill the requirements of this contract. The Contractor

shall grant the Government unlimited right to any and all data/products under this work directive that are developed and entirely funded by the Government. The Government, at its discretion, will post the final DA-authenticated TMs on the Internet for the soldiers access.

C.10.4 CONTRACTOR VALIDATION GOVERNMENT VERIFICATION

C.10.4.1 The Contractor is required to perform a 100% Validation on all data developed for the TMs to ensure accuracy, compatibility and completeness. The Contractor shall ensure that the TM data accurately reflects and supports all of the approved Buffalo configurations only, including any and all changes to the configurations resulting from testing, vendor parts supply and production line changes, Engineering Change Proposals (ECP) and Design Change Notifications (DCN) at no additional cost to the Government. The Contractor shall also perform a 100% review of the TM/ETM to ensure that it meets contract requirements. The Contractors review of TM/ETM shall be hands-on live testing, desk-top review, or a combination of these methods to ensure that the draft TM/ETM is fully operational so that the Government can evaluate their operation, navigation, and structure. The paper copy draft manual and the ETM shall be mutually inclusive of data, text and art, and format.

C.10.4.2 The Contractor shall deliver a Validation Plan, in its own format, informing the Government of the contractors planned Validation schedule, start date, time, and location of Validation 30 days prior to start of the Validation. This will allow time for the Government to attend and witness the Contractors Validation, and to combine its Verification with the Contractors Validation, if the Government so chooses. The Government reserves the right to review validation records in accordance with CDRL A017.

C.10.4.3 The Government has the right to verify all publication deliverables. Government reviews and verification may be done through statistical sampling and actual performance; but could include actual performance of all procedures, if deemed necessary by the Government. The Government does not intend to review and verify every task, but relies on complete, careful editing and review by the Contractor. If there are indications that the Contractor has performed incomplete or inadequate QA Reviews, the Government may elect to return products for rework and perform additional reviews on reworked product.

C.10.4.4 The Contractor shall also support the Governments Verification by having at least one person in attendance who was involved in the development of the TMs. This person will take notes of all corrections required and be able to answer questions about the TMs development. The Contractor will receive a copy of the Governments Verification Plan 30 days before Verification. The Verification Plan will outline the support (to include personnel, parts, EDIL, tools) the Contractor is required to provide to the Government.

C.10.4.5 Minimally, the Contractor is responsible to provide, for the Verification:

C.10.4.5.1 Contractor shall support the Buffalo configuration, and it's attachments for Government verification.

C.10.4.5.2 As required, technical representatives who are fully qualified to answer questions in regards to supplemental data, manual development, logistics, and provide necessary technical services.

C.10.4.5.3 Document all recommended changes to the Technical Manuals resulting from the conference.

C.10.4.5.4 Provide the necessary unique support items and services to manage, support, operate and maintain the Buffalo during the conference including EDIL, unique repair parts, and mandatory replacement parts subject to damage or destruction during the course of the verification. These repair parts will be made available prior to the beginning of the conference.

C.10.4.5.5 Sign off on verification record.

C.10.5 TECHNICAL PUBLICATION PACKAGING

Technical Manuals and Technical Bulletins shall be preserved in accordance with MIL-STD-2073, method 31 or 33, and shipped with each Buffalo vehicle produced after the TM and TB has been authenticated. The Government will print the manuals and bulletins and provide them to the Contractor. After the manuals are authenticated one set to include a CD-ROM must be shipped with each Buffalo. The Contractor is responsible for overpacking one set of the approved manuals and bulletins with each Buffalo shall not be shipped without authenticated manuals once they are received.

C.11 MILITARY PACKAGING DOCUMENTATION REQUIREMENTS:

C.11.1 Contractor shall develop Equipment Preservation Data Sheets (EPDS) for each configuration of the Buffalo. Contractor shall include requirements for long term outside storage for up to 2 years in adverse environments, long term controlled humidity (50%RH) storage aboard ships for 30 months at sea, short term administrative outside storage of 90 days, and disassembly procedures to meet clearance requirements for land, air, and sea shipments. Controlled humidity and administrative storage procedures shall ensure drive-on/drive-off capability. Packaging requirements for BII and COEI shall be developed by the contractor. BII shall be packed separate from COEI. HAZMAT COEI will be packaged and shipped separately from the system in accordance with CFR Title 49. The contractor shall designate stowage locations and securement provisions. The contractor shall ensure the stowage locations shall deter pilferage and shall not interfere with lifting, tie down or other transportation handling. The Contractor shall submit EPDS electronically to the Government with the capability to view, identify, make corrections, add comments and insert approval IAW CDRL A018.

C.11.1.1 Updates and Changes to Equipment Preservation Data Sheets: The contractor shall revise the Equipment Preservation Data Sheets to reflect design changes that affect the system's shipment configuration, weight, or transportability. The contractor shall also

provide revisions to the Equipment Preservation Data Sheets for each logistics change affecting packaging instructions for BII or COEI.

C.11.1.2 The Government will determine if all or selected portions of the Equipment Preservation Data procedures shall be validated to verify the adequacy of the vehicle preservation procedures and exercising requirements. Primary considerations will be given to the complexity and/or uniqueness of the process and/or materials involved. Government representative will attend and witness Contractors procedures.

C.11.2 Compliance with Federal and Industry Transportation Requirements: The Government ships using truck, rail, plane, and ship. The contractor shall develop Equipment Preservation Data Sheets for these modes of transportation and identify unique requirements for each mode of transport. This will allow the Government to process for shipment based on the intended mode of transport. The contractor shall comply with the applicable codes and standards listed here: (1) Code of Federal Regulation Titles 29, 40 and 49, (2) International Maritime Dangerous Goods Code, for vessel transport, (3) AFMAN 24-204, Preparing Hazardous Materials for Military Air Shipments, and (4) International Air Transportation Association (IATA) Dangerous Goods Regulations . The contractor shall include disassembly procedures to meet the requirements of the codes and standards mentioned above.

C.11.3 Component Parts Packaging Requirements: Contractor shall develop packaging data for all parts identified during the provisioning process as TACOM managed with an SMR code of P, excluding PR and PZ, to provide for life cycle support and safe distribution of the reparable items. Packaging data shall also be developed for Field Level Kits. Packaging shall be developed in accordance with MIL-STD-2073. All items shall be classified as select group (C.11.3.2) or special group (C.11.3.3) items. Any HAZMAT items shall be considered Special Group Items and have packaging designed to meet the requirement of the HAZMAT regulations identified in Paragraph C.11.2. The contractor shall provide LMI Data Products for packaging data systems, entry as specified in MIL-PRF-49506, Attachment 7 (Packaging Data Products) and Attachment 8 (Packaging Data Formatting Instructions). Contractor shall furnish drawings and notes sufficient for Government review concurrent with each packaging data submittal.

C.11.3.1 Excluded Items: Excluded items are those items with packaging data already in the TACOM Packaging File "PACQ", FEDLOG, FLIS, and those assigned a Contractor and Government Entity Code (CAGE) of: 1T416, 21450, 80204, 96906, 10060, 24617, 80205, 99237, 80244, 81343, 81346, 81348, 81349, 81352, 88044 or identified as GFE/GFM. Also EXCLUDED are items for: (1) not mission capable supply, (2) depot operational consumption, and (3) not-for-stock supply.

C.11.3.2 Coded Packaging Data: The Government will provide the contractor with periodic reports showing status of the program. Data is critical to populating the National stock Number Material Data Record (NSNMDR) and the Federal Logistics Information System (FLIS) Government data files and shall be 90% accurate. The contractor will rework submittal errors within 10 days after rejection by the Government. The contractor shall provide the necessary personnel, facilities, equipment, material, and the electronic data interface. The contractor shall include information for each of the items so TACOM can determine the adequacy of the packaging submittal. This includes item drawings and data such as Source, Maintenance & Reliability codes, Unit of Issue codes, Unit of Measure, Measurement Quantity, and copies of applicable Material Safety Data Sheets. The contractor shall furnish item drawings, photo documentation and notes sufficient for reviewing the packaging designs. Information shall be formatted and delivered in accordance with CDRL A019 and Attachment 7 and Attachment 8 (Packaging Data Products and Format).

C.11.3.3 Special Packaging Instructions (SPI): The contractor will prepare SPIs for each reparable item, each hazardous material item, each fragile, sensitive, critical item, shelf life items, electrostatic discharge sensitive items, disassembly procedures, items requiring special handling or condemnation procedures and any item that cannot be adequately packaged/defined as a Select item, following MIL-STD-2073-1D including kits and sets. SPIs shall meet the performance of ASTM D4169, Distribution Cycle 18, Assurance Level I, with Acceptance Criterion 3 (Product is damage free and package is intact). Each SPI submittal shall have a test report, including photographs, attached showing the condition of the package and part before and after the testing. Acceptable photographic evidence shall show the product is undamaged from all angles. SPI shall be in a format that can be viewed, changed, and commented upon. The contractor shall provide read/write access to SPI. All data submitted will be contractor validated and 95% accurate. The contractor will rework submittal errors within 10 days after rejection by the Government. Information shall be formatted and delivered in accordance with CDRL A020.

C.11.4 Contractor shall provide a Material Safety Data Sheet (MSDS) for each hazardous material item IAW CDRL A021. Packaging and marking for hazardous material shall be in accordance with MIL-STD-2073-1D Standard Practice for Military Packaging, Appendix J, Table J.Ia Specialized Preservation Code HM and the Joint Service Regulation AFMAN24-204/TM38-250 for Military Air Shipments.

C.11.5 Contractor shall conduct an assessment to determine if existing or new Long Life Reusable Container (LLRC) designs are suitable for reparable items including engine, transmission and transfer case. The contractor shall assess form, fit and function of existing containers. Contractor shall compare costs of modifications to existing designs and alternate new designs. Assessment data shall include analysis justifying the need for a new or modified container. If a new or modified LLRC is required, Contractor shall submit a proposal that includes development cost, validation testing requirements and cost, life cycle cost estimate, Container Design Retrieval System (CDRS) results and cost to develop a Technical Data Package (TDP) to develop new or modify existing LLRC. If a new or modified LLRC is required the Government shall be notified IAW CDRL A022.

C.11.5.1 Contractor shall conduct an assessment to determine if new or existing commercially available reusable container designs are suitable for any Line Replaceable Units (LRU). The contractor shall assess form, fit, and function. Compare costs to modify existing designs or alternate new designs. The commercially available reusable container must meet the validation testing requirements (Para.

C.14.3.3). Contractor shall develop and submit a SPI (Para. C.11.3.3) for each LRU with a commercially available reusable container describing the packaging processes and materials IAW MIL-STD-2073-1D. Delivery of SPI shall be IAW CDRL A020. If a new or modified commercially available reusable container is required, Contractor shall submit a proposal for each commercially available reusable container that includes development cost, validation testing requirements and cost, life cycle cost estimate and cost to develop a Technical Data Package (TDP) to the Government for review and subsequent approval or rejection IAW CDRL A022.

C.12 Quality Assurance Management

C.12.1 Quality Management System. The contractor shall implement a quality management system in accordance with the requirements of ISO 9001:2000 or an equivalent quality system as a measurement of product quality for the Buffalo MPCV systems that are produced for this contract. The contractors quality management system shall be made available and accessible at anytime for government review and evaluation to assess the contractors quality system compliance, implementation and effectiveness.

C.12.2 Material Review Board (MRB). The contractor shall establish an MRB or equivalent (DCMA approval) that includes the on-site Government representative, with complete authority for approval or disapproval of MRB actions. This board is responsible for disposition of minor nonconforming material (product, processes, etc.). Authority to approve all MRB decisions involving repair, rework, use-as-is material, and standard repair or other non-standard repair procedures will be at the discretion of the Government representative. Both standard and nonstandard repair procedures shall include instructions for reprocessing material after repair and shall specify all contractor inspections required. The contractor shall not consider a new standard repair process until all assignable causes of variance or omitted processes (or process steps) have been eliminated and corrected. The Government's review or concurrence of a repair technique shall not bar the Government's right to reject the material if the Government determines that the repair does not adequately correct the nonconformity. The establishment of the MRB shall be at no cost to the Government.

C.12.2.1 A minor nonconformance is defined as a nonconformance which does not adversely affect any of the following:

a. Health or safety
b. Performance or function
c. Interchangeability, reliability, or maintainability
d. Effective use or operation
e. Weight or appearance (when a factor)
f. Logistics

C.12.2.2 A major nonconformance is defined as a nonconformance other than minor that cannot be completely eliminated by rework or reduced to a minor. A nonconformance that is major or critical shall not be subjected to MRB disposition.

C.12.2.3 "Use-As-Is" is defined as a disposition of material with one minor nonconforming characteristics that has been determined (by MRB) to be usable for its intended purpose in its existing condition.

C.12.3 Corrective Action Board (CAB). The contractor shall implement a CAB consisting of top management representatives of appropriate contractor organizations, with Government oversight and authority for approval or disapproval of the CAB. The CAB shall have the level of responsibility and authority necessary to effect corrective actions for the specific cause(s) and continual improvement of product quality processes that shall ensure that the specific cause(s) of nonconforming material (product and process) has been identified and completely eliminated and that corrective and preventive actions are timely and effective throughout the contractors organization. The CAB shall have the authority to require investigations necessary to define effective corrective and preventive actions which shall result in continual improvement of product and processes, such as to reduce costs associated with scrap, rework and repair, and the elimination of nonconforming material. The establishment and implementation of the CAB shall be at no cost to the Government.

C.12.3.1 At no additional cost to the Government, the contractor shall develop and maintain a data system for recording nonconformance information. Typical data is as follows:

a. Quantity of nonconforming items
b. Recurrences (number and type)
c. Cause determinations
d. Long term corrective actions (status and delinquent actions)
e. Dispositions (number and type)
f. Costs related to each type of disposition (rework, repair, and scrap)

C.12.4 Acceptance Inspection Equipment. Except as otherwise expressly provided under this contract, the contractor is responsible for the supply and maintenance of all inspection and test equipment necessary to assure that the supplies conform to the contract requirements. Supplier-furnished inspection and test equipment shall equal or exceed the design criteria and shall be initially approved and certified by the supplier. All inspection and test equipment shall be made available to the Government Quality Assurance Representative (QAR) when required for verification purposes.

C.12.5 Final Inspection Record (FIR). [CDRL A025] The contractor shall prepare a Final Inspection Record (FIR) that incorporates the requirements of the contract and purchase description for the production (and test) vehicles delivered under this contract. The FIR shall incorporate drawings (installation, wiring schematics, assemblies, and subassemblies), major components, finishing, inspections, tests, certifications, configuration changes, automotive system, vehicle delivery preparation, deprocessing sheets and a deficiency sheet. The Buffalo MPCV FIR shall require approval by the Procuring Contracting Officer (PCO), which shall, also, include approval by

the PCO of each subsequent update and revision, throughout the production contract period. The contractor shall update and revise the Buffalo MPCV FIR that incorporates the above FIR requirements.

C.12.5.1 Production Vehicles System Acceptance. The approved FIR shall be utilized by the contractor to completely inspect Buffalo MPCVs for FPVI and to perform an end item inspection on the completed production Buffalo MPCVs. The FIR will be utilized by government representative(s) to conduct acceptance inspection on Buffalo MPCVs. Deficiencies discovered during inspection shall be corrected for the specific cause(s) by the contractor and described on the FIR Deficiency Sheet. The contractor, at no increase in cost to the government, shall correct the specific cause(s) of any deficiencies discovered during verification and deprocessing. The PCO approved deprocessing sheet shall accompany each vehicle delivered. The completed FIR (marked-up copy) for each vehicle shall be provided to government representative(s) for records.

C.12.5.2 Test Vehicles System Acceptance. Under no circumstances shall any test vehicle system be accepted by the Government (final DD Form 250), nor shall the contractor be eligible to invoice or claim any payment exceeding the progress payment rate or performance based payment rate, on the basis of the conditional DD Form 250. Execution of a final DD Form 250 and the completion of payment shall occur only after (i) successful completion of all testing and (ii) completion by the contractor of all refurbishment, upgrading, and corrections required to bring such vehicles up to serviceable and mission capable condition (10/20 standards).

C.12.6 First Article Test (FAT). A First Article Test (FAT), as specified in the Buffalo MPCV purchase description and the contract, shall be performed on up to seven (7) Buffalo MPCV systems. The FAT shall consist of a First Production Vehicle Inspection (FPVI), conducted at the contractors manufacturing facility and a Production Verification Test (PVT) conducted at a government test site(s). The test vehicles for PVT shall not be shipped to the government test site until acceptance of the FPVI report has been provided by the Procuring Contracting Officer, or as directed by the Procuring Contracting Officer.

C.12.6.1 Notification of First Article Test. The contractor shall provide written notification of the First Production Vehicle Inspection (FPVI), at least 20 calendar days prior to the start of FPVI. The written notification to the Procuring Contracting Officer and Administrative Contracting Officer (ACO) shall identify the time, date, and duration of the FPVI. For PVT, the Government will provide a 30 day notification to the contractor for system support in the PVT.

C.12.6.2 First Article Test - First Production Vehicle Inspection (FPVI). This initial part of the First Article Test (FAT) shall be conducted by the contractor at his manufacturing facility, witnessed and/or participated by government representative(s). At the Governments discretion, the FPVI vehicles may be randomly selected at any point during manufacturing process or at the completion of the FPVI units. The FPVI shall consist of verification of vehicle characteristic requirements in accordance with the contract and purchase description for conformance. The contractor shall determine the specific cause of any defects discovered and correct all defects, accordingly, at no increase in contract price. The contractors records that relate to the Buffalo MPCV build process and contract shall be readily available for government review prior to the start of the FPVI. Concurrent with the FPVI, the contractor shall conduct a shake-down test at his manufacturing facility on each of the seven (7) Buffalo MPCV test vehicles, prior to shipment to the government test site(s) (Yuma Proving Ground - YPG and Aberdeen Proving Ground - APG). The contractor's shake-down test shall ensure that the vehicles are test-ready and meet the Buffalo test schedule requirement.

C.12.6.2.1 First Production Vehicle Inspection Plan. [CDRL A024] The contractor shall submit an FPVI plan thirty (30) days after contract award, for conduct of the FPVI. The plan shall consist of the following: a) purchase description requirements and verification; b) Final Inspection Record (FIR); c) Buffalo MPCV build process(es) (or Buffalo MPCV Build Books for each FPVI vehicle); d) integration and assembly (in-process); e) fabrication process(es); d) complete configuration changes; e) Build of Materials (BOM); f) Qualified Products List (QPL); g) complete inspection and test data for Buffalo build (i.e, suppliers and subcontractors); h) specifications (subsystems, components and materials); i) certifications; j) product and installation drawings; and k) purchase orders.

C.12.6.2.2 Certification Requirements. The contractor shall prepare certifications for items identified in the Buffalo MPCV system purchase description. Certifications shall include all documentation, objective evidence, examinations and test results where applicable. Certification of compliance to specific contract and/or specification requirements shall be a statement to the effect that the contractor has complied. Certifications shall be complete and available (and copies provided) to the Government for review at the time of the FPVI. Subcontracting does not relieve the contractor of providing the required certification information from either the subcontractor or their manufacturers (nor distributors). If any certification is unacceptable to the Government, the contractor shall conduct additional examinations/tests or provide additional documentation as required to validate that certification at no increase in contract price. Information on acceptable certifications is identified in E of this contract.

C.12.6.2.3 First Production Vehicle Inspection Report. [CDRL A023] The contractor shall prepare and submit for acceptance an inspection and test report at the completion of FPVI, in accordance with DI-NDTI-80809B. The report shall describe in detail the results of the FPVI and shall be substantiated by objective quality evidence. The report shall define in writing all deficiencies for the specific cause(s) and describe all long term corrective actions taken that eliminate the specific cause for the life of the affected items. If the FPVI is disapproved and additional inspections are required, the contractor shall resubmit an inspection and test report. All costs related to additional FPVI inspections and tests shall be borne by the contractor, at no increase in contract price.

C.12.6.3 Test Vehicle System Shipment. Under no circumstances shall any test vehicle system be shipped from the contractors facility to the test site until:

a. A complete inspection has been performed by Government personnel, representing the ACO and the PCO at the procuring activity;
b. All deficiencies revealed by the Government inspection have been corrected by the contractor and approved by the Government, as evidenced by a conditional DD Form 250, signed by an authorized Government representative before shipment.

C.12.6.4 First Article Approval of Buffalo MPCV System. First Article approval shall be required for this contract, under the authority of FAR Clause 52.209-4, Alt I & II, First Article Approval Government Testing. If the First Article is disapproved, the contractor upon Government request shall repeat any part or all of the First Article Test (FAT) on the first article vehicles. All costs related to these tests shall be borne by the contractor.

C.12.6.5 First Article Waiver. The contractor may request a waiver; however, supporting documentation shall accompany the request. The Government may waive the requirement for the First Article Test where supplies identical or similar to those called for in the schedule have been previously furnished by the contractor and have been accepted by the Government.

C.12.6.6 Test and Production Locations. The Contractor shall produce the Buffalo MPCV production (and test) vehicle systems and conduct the First Production Vehicle Inspection (FPVI) at the same location and facility. Should the contractor change the location and facility of production of Buffalo MPCVs and first article units, a new First Article Test shall be required, regardless of any previous First Article Tests conducted.

C.12.6.7 Failure to Deliver. If the contractor fails to deliver any First Article unit on time, or if the Procuring Contracting Officer disapproves any First Article unit, the contractor shall be deemed to have failed to make delivery within the meaning of the DEFAULT clause of this contract.

C.12.6.8 Test Units. Unless otherwise provided in the contract, and if the approved First Article is not consumed or destroyed in testing, the contractor may deliver the approved First Article as part of the contract quantity, if it meets all contract requirements for acceptance.

C.12.6.9 First Article Test Production Verification Test(s) (PVT). The second part of the First Article Test (FAT) is the Production Verification Test (PVT) that will be conducted at Government test sites (See Section E, Test and Evaluation), on up to seven (7) Buffalo MPCVs that underwent FPVI at the contractors facility. The PVT will include the following: Developmental Testing (DT); Operational Testing (OT); Logistics Demonstration (Log Demo), RAM (reliability testing) and FPTs (priced-option).

C.12.6.9.2 Transportation Costs. The PVT vehicle system shall be shipped to the specified Government test site(s) in accordance with the requirements of this contract. All vehicle shipment charges from the contractors plant to the various sites and their return to the plant for refurbishment shall be the sole responsibility of the contractor.

C.12.6.9.2 Limited Technical Vehicle Inspection (LTVI). Upon receipt of the test vehicles at the test site(s), a limited technical assessment of each test vehicle will be conducted jointly by government and contractor representatives, prior to the start of PVT. The assessment will again review configuration changes and the condition of each test vehicle, since completion of FPVI. The approved Buffalo MPCV FIR (Final Inspection Record) will be utilized to conduct the technical inspection. All technical documents that were utilized for the build of the Buffalo MPCVs shall utilize for the technical assessment. These documents shall include: product drawings, Buffalo purchase description, specifications and any other technical documents that were utilized for the build of the Buffalo MPCV. The contractor shall make available all applicable technical documents at the test site for conduct of the LTVI and assessment. The contractor shall be allowed no more than eight (8) hours per vehicle to conduct the LTVI and to condition the vehicle as operational.

C.12.6.9.3 RAM (Reliability, Availability, and Maintainability) Testing. As part of the PVT, the Government will conduct RAM testing on Buffalo MPCV systems at a Government test-site on a quantity(ies) that will be determined by the Government. The contractor shall provide on-site support as required and shall be required to respond to TIRs that are generated by the tester. The contractor will be required to participate in scoring conferences, at the completion of the tests.

C.12.6.9.4 System Test Support. The contractor shall provide capable and knowledgeable on-site technical support throughout the completion of the Production Verification Test (PVT) at the government test sites: Aberdeen Proving Ground (APG) and Yuma Proving Ground (YPG). The contractors support of system testing shall be the following: system support package (SSP); system support package list (SSPL); technical support personnel or Field Service Representative(s) (FSRs); logistics and maintenance support above the DS/GS (Direct Support/General Support) level; support equipment (repair and/or replacement or spare parts, technical manuals, Basic Issue Items, special tools, and expendable parts). The SSP shall be delivered to the government test sites 30 days prior to the start of production verification test. FSRs and/or technical personnel shall report to the test site when directed by the procuring activity.

C.12.6.9.4.1 The contractor shall bear sole responsibility for correction (or fulfillment) of shortages or deficiencies and currency of the SSP and SSPL that impact PVT during the test period. If shortages or deficiencies in system test support (SSP and SSPL) are discovered at the time of or during the tests, the contractor shall bear the sole responsibility of fulfillment of all shortages for all tests, within twenty-four (24) hours of notification. Accordingly, updates to the SSP and SSPL shall be delivered to the test site (prior to retest) within twenty-four (24) hours of notification. All applicable provisions of C.12.3.3.2 and C.12.3.3.3 shall equally apply, entirely.

C.12.6.9.4.2 System Support. System support is defined as providing any items, parts and components required to support the entire vehicle configuration for on-vehicle components. The Government will provide petroleum oil and lubricants (POL) for each vehicle undergoing testing. The contractor shall provide all other tools to support the on-vehicle maintenance that is to be performed by the Government. The TMs that the contractor provides at the test site shall include, as a minimum, all operations and remove/replace maintenance procedures.

C.12.6.9.4.3 System Support Package. The system support package shall be of the same configuration as the test articles and shall sustain the PVT for the entire test period. The SSP and SSPL are described, as a minimum, as follows:

(1) Spare/Repair Parts. All SSPs shall contain parts to meet the requirements arising from predicted failures, scheduled maintenance, and anticipated wear out sufficient to support the test requirements.

(2) Common and Special Tools. Required common tools/took kits shall be identified on the SSP List.

(3) Basic Issue Items (BII), Component of the End Item (COEI). BII and COEI shall be identified in the SSP List.

(4) Expendable Supplies. Expendable supplies such as oils and lubricants shall be identified on the SSP list. Only unique products shall be supplied by the contractor.

(5) Technical manuals shall be supplied in quantities sufficient for the conduct of performance tests.

(6) Production vehicles/platforms sufficient for the conduct of testing will be provided.

(7) Technical Personnel or FSRs (Field Service Representative(s)).

C.12.6.9.4.4 Field Service Representatives (FSRs) - Contractor. Field Service Representatives shall advise the Government on routine operation, safety, maintenance, calibration, resolve system support matters/issues, and interface with any component part involving the contractor and his suppliers. The FSRs shall be available to assist the entire maintenance workday (not to exceed 12 hours).

C.12.6.9.4.5 Test Coupons. The contractor shall provide the test coupons necessary to complete testing (See CLIN 6001AA). The coupon list will be developed by the T&E sub-IPT.

C.12.6.9.4.6 System Support Package List (SSPL) and System Support Package Plan (SSP Plan) [CDRL A026]. The contractor shall prepare and deliver a system support package list (SSPL) and a system support package plan (SSP Plan) to support Production Verification Test (PVT) throughout completion. The SSPL and SSP Plan shall include the following: spare/replacement of repair parts; common and special tools; Basic Issue Items (BII); Component of the End Item (COEI); expendable supplies; technical manuals; production/test vehicles; and technical personnel. The SSPL and SSP Plan shall be described in detail and shall identify the status and source of supply of each item, whether contractor or government supplied. The contractor shall maintain an updated SSPL and SSP throughout PVT for any system retest and/or configuration changes.

C.12.7 Test Incident Reports (TIRs). [CDRL A027] During conduct of the Production Verification Tests (DT, OT, RAM, Log Demo, and FPTpriced option), Test Incident Reports (TIRs) will be generated from the tester. The contractor shall be responsible for accessing computer databases for all TIR data during Government testing. Each TIR written will be "scored" per the Failure Definition/Scoring Criteria. The contractor shall respond to TIRs as directed below with a Failure Analysis and Corrective Action Report (FACAR) in accordance with DI-RELI-81315. The response shall be submitted in the Army Test Incident Reporting System (ATIRS) as well as in an electronic format provided to the PM. A final FACAR shall be submitted to the Government within the time limits listed below. Should a final response not be available within the designated time, an interim/preliminary response is required for submittal. Submittal requirements are based on the TIR release date and are expressed in calendar days.

Incident Classification	FACAR Submitted Within
Critical	72 hours after contractor notification
Major	15 days
Minor	30 days
Information	Submit FACAR if requested by the Government.

Note: The contractor shall coordinate with the U. S. Army TACOM, LCMC, Product Quality Manager for the Buffalo MPCV system for assistance in accessing the TIR databases for the purpose of TIR retrieval.

C.12.7.1 Test Vehicle System Failure. Failure of either the Production Verification Test (PVT) or Follow-on Production Test (FPT) ,when required by the contract or exercised by the PCO, vehicle systems as a result of any defect detected shall be cause for rejection of such test vehicle systems and vehicle systems being offered for acceptance, until objective evidence has been provided by the contractor that corrective action has been taken to eliminate the defect. Any defect found during, or as a result of the PVT or FPT shall be prima facie evidence that all vehicle systems produced that are represented by the PVT, FPVI, or a previous FPT are similarly deficient unless contrary objective evidence satisfactory to the Contracting Officer is furnished by the contractor. Such a defect on all affected vehicle systems associated repair parts and in the production process itself shall be corrected by the contractor at no increase in contract price.

C.12.7.2 Vehicle System Retest. In the event of vehicle system test failures, the Government reserves the right to choose to retest the same or another vehicle system upon correction of the defect(s) by the contractor to the complete extent and duration specified in the test program, or to such lesser extent as the Contracting Officer deems appropriate. If another vehicle system is selected, the contractor shall be responsible for all deficiencies detected regardless of relationship to the original test failure and shall comply with the provisions above. The contractor shall bear responsibility for delays in the program test period resulting from vehicle defects or failure to adequately furnish parts support (within 24 hours on a scheduled test day) and the Government will have the right to extend the specified program test period accordingly for such contractor induced delay. The extent of any responsibility for contractor induced delay shall be limited to the Governments direct operating costs.

C.12.8 Test Vehicles Refurbishment. The contractor shall complete a detailed inspection and assessment of up to seven (7) test vehicles upon their return to the contractor's manufacturing facility. The contractor shall submit a detailed inspection and assessment report on each vehicle to the Government for review within fifteen (15) days for Government review. The Government will review the report within twenty (20) working days and provide direction on the tasks that the contractor shall perform. Within thirty (30) days after receipt of Government direction, the contractor shall submit a ceiling price proposal for refurbish the test vehicles to fully mission capable (10/20) standards for the selected tasks. Refurbishment to 10/20 standards shall be completed within sixty (60) days, after Government provides direction to initiate refurbishing. Refurbishing of the test vehicles shall be performed by the contractor at no increase in cost to the Government.

C.12.9 Manufacturing Standard/Logistics Vehicle. After completion of PVT, the designated test vehicles shall be restored to 10/20 standards at the contractors expense. The First Production Vehicle or another production vehicle (at the PCOs discretion) may be retained as the manufacturing standard/logistics vehicle until completion of the contract and submitted as the last unit to be delivered under the contract. All configuration changes as a result of drawing and/or specification modifications taking place after the FPVI and/or PVT shall be made to the First Production Vehicle so that this vehicle will be representative of the current configuration throughout the life of the contract.

C.12.10 Follow-on Production Test (FPT) Priced Option. During the performance of this contract, Follow-on does not plan to have more than quarterly FPTs starting the fourth quarter after the month of First Article Approval. The FPTs will be conducted per the Verification Matrix of the Buffalo MPCV system ATPD utilizing a Government prepared test plan. The extent of testing may be reduced at the discretion of the Government. The FPTs will be approximately 90 days in duration; however Production Tests (FPT) will be periodically conducted by the Government at a Government test-site [TBD]. The quantity of test vehicles to conduct the FPT is two (2) Buffalo MPCV systems. The Government, delays caused by test vehicle breakdown(s) or failure of the contractor to comply with specifications and approved configuration/technical requirements will not be the basis for adjustment of the contract delivery schedule or contract price.

C.12.11 Control Test. The contractor shall conduct quality conformance inspection (QCI) on all characteristic items identified in Table I of the purchase description or the FIR throughout the production contract, which include control test characteristic items. After initial QCI on all characteristic items on the first five (5) production vehicles, the contractor shall conduct control tests (CNT) (Table 1 of the purchase description) when exercised by the PCO. The control test production vehicles will be randomly selected from the production line by government representative(s). All inspections and tests will be witnessed and/or participated by the designated government representative(s). The control test(s) shall provide documentation of all test results and the specific or assignable cause of the deficiency.

C.12.11.1 Control Test Vehicles. When exercised by the PCO, selected vehicle(s) that undergo the control test(s) will NOT be accepted by the Government on a DD 250, nor shall the contractor be eligible for payment until the control test vehicle has successfully passed all testing and completion of the FIR (government and contractor conducted). The final DD 250 will be approved AFTER the contractor has made all required corrections to control test vehicle deficiencies and the lot inspections/corrections are completed.

C.12.12 Welding. Thirty (30) days prior to welding production vehicles, the contractor shall have available at all welding facilities welding procedures (WPS) which have been tested and qualified for use in accordance with applicable specifications. Ferrous armor and structural steel with a yield strength equal to or greater than 80KSI shall be welded per AWS D1.1. All weldments involving crack prone materials such as MIL-A-46100 subject to fatigue loading shall be preheated prior to welding and shall be duly noted in the WPS. Aluminum armor or structural aluminum shall be welded IAW AWS D1.2. Welding processes not covered by the referenced documents shall de done to any AWS welding standard appropriate for the material thickness, strength and welding process selected. All welders shall be qualified to the applicable welding specification prior to production. The contractor shall advise the Contracting Officer when these documents are available for review and acceptance by the government at the prime contractor's facility. If the government finds welding controls to be in non-compliance to the contract, the contractor must take immediate corrective action to resolve the non-compliance. The contractor shall also provide a list of welding vendors who supply welded parts which must comply with the two noted specifications. An audit schedule will be coordinated between contractor and government representative to assure that these vendors meet the same requirements as noted herein.

C.12.13 CARC paint pretreatment shall be as described in Section E and the purchase description. For surfaces that exceed 400 degrees F, CARC shall not be used; a commercial high heat paint or MIL-B-14105 may be used. Adhesion testing shall be performed on a completely cured CARC finish.

C.12.14 Product Quality Deficiency Reports (PQDR) Field Generated. The contractor shall investigate and provide long term failure analysis and corrective action for all PQDRs, generated on Standard Form 368 (existing form or electronic) against products or supplies produced under this contract, at no additional cost to the Government. Upon request of the QDR exhibit, the contractor shall be responsible for all costs associated with shipping the QDR exhibit(s) to their designated location. The contractor shall provide replacement parts for all components determined to be deficient or attributable to workmanship/product nonconformance, at no additional cost to the Government. Production/field corrective actions shall be accomplished at no additional cost to the Government. Corrective actions requiring configuration changes shall follow the configuration requirements as specified in C.7.

C.12.14.1 Product Quality Deficiency Reports (PQDRs) Field Generated. The contractor shall provide a written response within 72 hours (electronically) to all field reports generated from the users. Product Quality Deficiency Reports that relate to safety shall require a written response within 24 hours.

C.12.14.2 [CDRL A028] A final written response, in contractor format, shall be submitted per DI-RELI-81315 (T) to the designated government representative within 30 calendar days of receipt of a PQDR. If a final response is not ready for submittal, the contractor shall submit an interim response detailing the status of the investigation. The response shall report on the actions taken, corrective action, and contractor's position with respect to repair or replacement parts.

C.12.15 Product Quality Deficiency Report (PQDR) Government Furnished Material (GFM). [CDRL A029] Upon receipt of deficient Government Furnished Material (GFM), the contractor shall prepare and submit a contractor form to the designated government office per DI-QCIC-80736.

C.12.16 Quality Records. All records of inspections, examinations, certifications, tests, supplier audits, and purchase orders shall be retained by the contractor for a period of 5 years after contract close-out. These records shall be made available (and copies provided) to the Government, upon request. Additionally, where product or process deficiencies have occurred, the contractor's records shall provide documentation that fully describes the root cause of deficiencies and root cause corrective actions.

C.13 SAFETY ENGINEERING AND HEALTH HAZARDS

C.13.1 Safety Engineering Principles: The contractor shall follow good safety engineering practices when making any modifications to the vehicle system and/or its components. Modifications to the system design and/or operational/maintenance procedures shall be developed with at least the following considerations:

C.13.1.1 Identify hazards associated with the modifications by conducting safety analyses and hazard evaluations. Analyses shall include operational, maintenance, and transport aspects of the equipment along with potential interfaces with subsystems.

C.13.1.2 Eliminate or reduce significant hazards by appropriate design or material selection. If hazards to personnel cannot be avoided or eliminated, steps shall be taken to control or minimize those hazards.

C.13.1.3 Locate equipment components and controls so that access to them by personnel during operation, maintenance, or adjustments shall not require exposure to hazards. All moving parts, mechanical power transmission devices, exhaust system components, pneumatic components and hydraulic components which are of such a nature or so located as to be a hazard to operating or maintenance personnel shall either be enclosed or guarded. Protective devices shall not impair operational functions. Examples of hazards to be considered include, but are not limited to: high temperature, chemical burns, electrical shock, cutting edges, sharp points, and toxic fumes above established threshold limit values.

C.13.1.4 Assure that suitable warning and caution notes are included in instructions for operation, maintenance, assembly, and repairs; and that distinct markings are placed on hazardous components of the equipment.

C.13.2 Safety Assessment Report (SAR): The contractor shall provide the Safety Assessment Report (SAR) in accordance with DI-SAFT-80102B and CDRL A030 to identify all safety and health hazards associated with the system to include any modifications. The SAR shall include safety and health hazard assessments completed as a result of system safety analyses, hazard evaluations, and any independent testing; which shall be conducted, documented, and updated as necessary when modifications are made. The SAR shall identify all safety and health features of the hardware, software, system design, and inherent hazards and shall establish special procedures and/or precautions to be observed by Government test agencies and/or system users. When updating the hazard list portion of the SAR, the contractor shall provide a description of any potential or actual safety and health hazards of the vehicle, the effects of the hazard, and when the hazard may be expected to occur under usual and unusual operating or maintenance conditions. The contractor shall identify actions taken to mitigate the risk associated with the hazards and categorize the risk before and after mitigation in accordance with MIL-STD-882D. MIL-STD-882C provides further information that may be used for guidance. Risks must be identified by hazard severity, hazard probability, and risk level. Mitigation actions include recommended engineering controls, safety features or devices, warning devices and procedures and training. The contractor shall include in the SAR copies of Material Safety Data Sheets (MSDS) for all hazardous materials incorporated into the system. Examples of hazards to be identified in the SAR include, but are not limited to: sharp edges/moving parts hazards, physical hazards (e.g. heat or cold stress, acoustical energy, ionizing and non-ionizing radiation, etc.), chemical hazards (e.g. flammables, corrosives, carcinogens, etc.), toxic fumes (exhaust emissions), electrical hazards, noise, whole-body vibration, compliance issues with regulatory organizations, fire prevention issues, and ergonomic hazards.

C.14 MANPRINT

C.14.1 Manpower and Personnel Integration (MANPRINT). A comprehensive management and technical program that focuses attention on human capabilities and limitation throughout the system life cycle. MANPRINT's goal is to optimize total system performance at acceptable cost and within human constraints. The MANPRINT program shall include aspects of all seven domains (Manpower, Personnel, Training, Human Factors Engineering, System Safety, Health Hazards, and Soldier Survivability). The contractor will be actively involved in the Government's MANPRINT program and participate in the MANPRINT IPT meetings.. The contractor will utilize AR 602-2 as a guide for the MANPRINT program.

C.14.2 Manpower, Personnel, and Training (MPT): The contractor will ensure that soldier-related manpower and training cost are minimized while retaining maximum combat effectiveness through system design and the optimum use MPT resources . All designs and modifications shall be analyzed to ensure maximum use of available MPT resources within the appointed unit. The contractor shall identify MPT shortfalls or issues and implement appropriate resolutions. The contractor will utilize AR602-2 as a guide for the MPT.

C.14.3 Human Factors Engineering (HFE). Human Engineering principals and design standards shall be applied in the vehicle design, systems integration and human-machine interfaces. The contractor shall assure that the vehicle operation, maintenance, repair activities and procedures shall accommodate a wide range of individual physical capabilities, which requires the range from 5th percentile female to the 95th percentile male. The contractor shall identify HFE shortfalls or issues and implement appropriate resolutions. The contractor shall utilize MIL - STD-1472F as a guide for managing HFE .

C.14.4 Soldier Survivability. The contractor will apply principal and design standards in the vehicle system, which will reduce detectibility, and minimize the soldier physical and mental fatigue. The contractor shall identify Soldier Survivability shortfalls or issues and implement appropriate resolutions. The contractor will utilize AR 602-2 as a guide for Soldier Survivability.

C.15 HAZARDOUS MATERIALS MANAGEMENT

C.15.1 The Contractor shall prepare a Hazardous Material Management Report which, at a minimum, shall identify all hazardous materials required for system production, and sustainment, including the parts/process that requires them. This report should be prepared in accordance with National Aerospace Standard 411, section 4.4.1 per DI-MISC-81397, CDRL A031.

C.15.2 Hazardous Materials. No asbestos, radioactive materials, mercury, hexavalent chromium (electroplating and coatings processes), cadmium (electroplating), or other highly toxic or carcinogenic materials as defined in 29 CFR 1910.1200 shall be used on the Buffalo without prior approval from the government. Class I and Class II Ozone Depleting Substances shall not be used.
This applies to both contractors and subcontractors.

C.16 EQUIPMENT CONTROL RECORD (DA FORM 2408-9)

C.16.1 The Contractor shall prepare a DA Form 2408-9, Equipment Control Records (Government furnished form) for each vehicle it delivers. The Contractor shall prepare the form in accordance with the instructions in paragraph 5-7 c (3) Acceptance and registration of DA PAM 750-8, dated 25 Feb 05, to report acceptance of the Buffalo MPCV into the U.S. Army inventory. A blank copy of the form is enclosed at Attachment 9. The contractor shall have the Defense Contract Management Agency (DCMA) Quality Assurance Representative (QAR) complete blocks 22 and 23 as the person accepting the item into the Army inventory. After the DCMA QAR completes blocks 22 and 23, the contractor shall distribute the DA Form 2408-9 as follows:

C.16.1.1 Submit the control copy (copy # 1) within five working days to:

Director
U.S. Army Materiel Command's Logistic Support Activity
ATTN: AMXLS-MR
Redstone Arsenal, AL 35898-7466

C.16.1.2 Submit the National Maintenance Point (NMP) copy (copy #2) within five working days to:

Commander
U.S. Army Tank-automotive and Armaments Command
ATTN: AMSTA-LC-CJCB, MS326
6501 East 11 Mile Rd.
Warren, MI 48397-5000

C.16.1.3 Place Log Book copy (copy # 3) in a dry, protected location, secured in the operator station, and shipped with each vehicle.

C.17 WARRANTY

C.17.1 Requirement For Warranty

The contractor shall provide its standard commercial warranty with all applicable pass through warranties. The warranty will be incorporated in the contract at Attachment 4 See Warranty TB-Attachment 7.

C.17.2 In accordance with CDRL A032, the contractor shall submit a report reflecting all of the warranty claims processed on each vehicle within the appropriate reporting period. In addition to the data required by the DID, the report shall include the number of operating hours on the vehicle at the time of fault. The report shall also contain the warranty implementation date by vehicle serial

number, shipping destination, and DODAAC.

C.18 TRAINING

C.18.1 Training Support Package Validation and Verification. The Contractor shall provide a critical tasks list, program of instruction (POI), instructor guide, student guide and training schedules for each level of training. The training support package shall be developed in accordance with TRADOC Reg 350-70. The Government will review, recommend changes and serve as the final approving authority for the above documents. The Contractor shall notify the Government thirty (30) days in advance of its intended validation of the critical tasks so that the Government can make timely arrangements to attend the validation process. The Government may decide not to attend all validation processes, but, instead, may rely on complete and accurate critical task development by the Contractor. Critical tasks that are found to have deficiencies will be adjusted/corrected, at no additional cost to the Government. Training tasks shall also be corrected or updated, at no additional cost to the Government, after completion of Instructor and Key Personnel Training (I&KPT) class. CDRL A033.

C.18.2 Instructor and Key Personnel (I&KPT) Training. The Contractor shall conduct the following I&KP training session at Fort Leonard Wood MO: to include 1 field level maintenance class, 1 operator class to U.S. military trainers from the US Army Engineer School, US Army Ordnance School, Combine Arms Support Command (CASCOM), and Counter Explosive Hazard Center (CEHC). The Contractor shall provide the Government with an operator and field maintenance training support package thirty (30) days in advance of its intended I&KPT. The Contractor shall provide a complete training support package to each student. Students shall retain possession of the course technical manuals and training materials. Each operators course shall be 5 days (40 hours) in length, and each field maintainers course shall be 10 days (80 hours) in length. The operators class size will not exceed 12 students, 4 to 1 student to instructor ratio. The maintenance class size will not exceed 8 students, 4 to 1 student to instructor ratio. The Contractor shall provide Two (2) Training Instructor or Field Service Representative (FSR) to provide training.

C. 18.2.1 Training Location and Training Classes: The Contractor shall conduct the following I&KPT classes at Ft. Leonard Wood, MO:

a. One (1) OP class
b. One (1) FM class

C.18.3 NET: The Contractor shall conduct NET Operator and NET Maintenance-training sessions to U.S. Military Units and Contractor logistics support personnel receiving and maintaining the Buffalo systems. Classroom size shall be 12 students for operator courses and 8 students for maintenance courses, 4 to 1 student to instructor ratio. These training sessions shall include train-the-trainer level training. The contractor shall provide a complete training support package (TSP) to each fielded unit. Training support package will include one copy of the POI, Lesson Plan, Instructor Guide, Student Guide, and media used to conduct training for sustainment training. Both Operator and Maintenance class shall have a 10 to 15 question test to be administered at the end of the course. The contractor shall incorporate all Government approved equipment configuration changes into the training materials as they occur at no additional cost to the Government. Students shall retain possession of the course technical manuals and training materials. All training shall be conducted by certified instructors. (CDRL A034)

C.18.3.1 Class sizes and class lengths:

1. All classes shall not exceed twelve (12) students for operator classes and eight (8) students for maintenance classes, 4 to 1 student to instructor ratio
2. OP class shall not exceed forty (40) hours in duration
3. FM class shall not exceed eighty (80) hours in duration

C. 18.3.2: The Government shall have the option to have the following COUNS NET classes conducted;

1. Twenty nine (29) OP classes
2. Twenty nine (29) FM classes

C.18.3.3 NET Support Package (NETSP) Consumables List: The Contractor shall provide a list of consumables needed to support field and sustainment Maintenance training. The list shall be prepared in Contractor format and delivered in accordance with CDRL A035.

C.18.3.4 Letter of Support Requirements: The Contractor shall prepare a Letter of Support Requirements (Contractor format) that depicts what is needed to be on hand to support training at any given training location. The letter shall be prepared in Contractor format and delivered in accordance with CDRL A036. The letter shall define training support requirements for:

1. OP NET
2. FM NET

C.18.3.5 Instructors: All classes cited above shall be supported by two (2) certified Buffalo instructors with one OEM FSR on-call as needed. Instructors shall be U.S. Government certified, or have a teaching degree from a public/private training institution, or be certified by the OEM. Certification documentation shall be provided to the NET manager.

C.18.3.6 Class schedules: Classes may be conducted any day of the week, including Saturday and Sunday, to support Government

requirements. All class schedules shall be provided to the contractor after being established between the NET manager and each Gaining Command Training POC.

C.18.3.7 Training Certificates: The Contractor shall provide a training certificate for Operator and Maintenance training to each student that attends and successfully completes training. The training certificate shall be in the Contractors format. Both Operator and Maintenance class shall have a 10 to 15 question test to be administered at the end of the course Successful completion requirements for issuance of a training certificate, shall be a score of 70% or above on a test. CDRL A037.

C.18.3.8 Class Rosters and Course Critique Sheets: The Contractor shall provide a class roster containing name, rank, unit, e-mail address if available, type of training, training dates, last four of each students SSN and completed course critique sheets for each class conducted to the NET manager. Both can be in Contractor format and must be submitted at the end of each course. CDRL A038.

C.18.3.9 Training Support: The Government will provide at least one (1) Buffalo to support each NET class cited above. The Government will also provide the required common tools.

C.18.4 Training Support for Verification/Log Demo: The Contractor shall provide Two (2) Training Instructor or Field Service Representative (FSR) to provide informal training on the Buffalo vehicle with respect to vehicle orientation for the following areas:

a. General vehicle overview to include all operator controls and operator PMCS
b. Buffalo electrical system overview
c. Buffalo pneumatic system overview
d. Crane and Camera operation.

C.18.4.1 The informal training shall take place at Ft. Leonard Wood, MO and shall not exceed twenty four (24) hours/three (3) working days in duration. The Government will provide the training facility, training vehicle, tools and equipment necessary to conduct the training. Class size shall not exceed six (6) students. The Contractor shall use the latest version of the Buffalo TM to train the students. The Government will provide the TMs to support the training.

C.18.4.2 The Contractor shall conduct Operator (1) and Maintenance (1) training sessions to test community, data collectors and test players, at either Aberdeen Proving Grounds or Yuma Proving Grounds. Classroom size shall be 12 students for operator courses and 8 students for maintenance courses, with additional class observers possible. The contractor shall provide a complete training support package (TSP) to the Government thirty (30) days prior to training. Training support package will include one copy of the POI, Lesson Plan, Instructor Guide, Student Guide, and media used to conduct training for sustainment training. Both Operator and Maintenance class shall have a 10 to 15 question test to be administered at the end of the course. The contractor shall incorporate all Government approved equipment configuration changes into the training materials as they occur at no additional cost to the Government. Students shall retain possession of the course technical manuals and training materials.

C.18.5 VEHICLE HAND-OFF
C.18.5.1 Inventory any material shipped with the vehicle, e.g., technical publications, special tools, initial service packages. (If desired, the inventory may be done concurrently with the units inventory.)

C.18.5.2 Provide one-hour familiarization to 6 to 8 people from the receiving unit on first machine delivered so they can safely move the vehicle until full training is conducted. Familiarization includes operator start-up, operating and shut down procedures, safe operations, and daily and weekly service locations and checks.

C.18.5.3 Activation of the warranty, which includes stamping the effective date (date of delivery to gaining unit) on the vehicle warranty data plate, discussing with the unit the terms and details of warranty administration, and pointing out the warranty information included in the TMs.

C.19 UNIQUE IDENTIFICATION DESCRIPTOR
C.19.1 The Contractor shall deliver a UID component candidate list of items qualifying for the UID, per DFARS Clause 252.211-7003 Item Identification and Valuation. The Government will review, make changes to, and provide approval to the UID candidate list. The Government will provide the final UID list after it has evaluated the information and determined which components will require a UID. See Attachment 10. (CDRL A039)

Examples of applicable candidates are: Engine, Transmission, Axles, etc.

C.19.2 The Contractor shall mark each Buffalo MPCV with a Unique Identification Descriptor (UID). The UID is to be developed in accordance with MIL-STD-130M, or the most recent version of this document.

C.19.3 The Contractor shall use MIL-STD-130M and MIL-STD-129 to determine the best method in which to mark the Buffalo MPCV.

C.19.4 As the requiring agency, the Government has determined that the Contractor will develop the UID as Machine-readable information (MRI) marking. The MRI marking shall be in 2D Data Matrix marking and meet the minimum quality requirements per MIL-STD-130M. The MRI protocol shall follow protocol standard ISO/IEC 15434 or ISO/IEC 15418. The MRI content shall contain:

- Applicable Enterprise Identifier (EID)
- Serial Number
- Part or Identifying Number (PIN)
- National Stock Number (NSN)
- Nomenclature

C.19.5 The Contractor shall invoice using a Receiving Report (CDRL A040). The data required in this report shall include the data specified in

C.19.4 This report is due in conjunction with the delivery of the Buffalo MPCV. It is the Contractors responsibility to submit receiving reports electronically into the DoD Wide Area Workflow Receipt and Acceptance System (WAWF). If the Contractor cannot use WAWF for UID, the Contractor must notify the Government at the Start of Work Meeting and arrangements may be made to allow the Contractor to submit the receiving report through either X12 or UDF submission formats.

Information on WAWF is available at: http://www.acq.osd.mil/dpap/UID/DataSubmission.htm
http://www.dcma.mil Under Electronic Invoicing

C.19.6 It is recommended that the Contract has a portion of its UID submission reports validated prior to submitting all UID reports to WAWF. This can be done by sending an email to the Unique Identification Program Office (info@uniqueid.org). Include your name, organization, phone number, email address, and the file format you will be using.

C.20 RADIO FREQUENCY IDENTIFICATION. In addition to the requirements in DFARS 252.211-7006, RFID tags shall also be applied to each vehicle.

*** END OF NARRATIVE C0001 ***